

Title (en)  
CORE-SHELL STRUCTURE, PREPARATION, MEDICINE FOR EXTERNAL APPLICATION, TAPE AGENT AND COSMETIC PRODUCT

Title (de)  
KERN-HÜLLE-STRUKTUR, HERSTELLUNG, ARZNEIMITTEL ZUR EXTERNEN ANWENDUNG, BANDMITTEL UND KOSMETISCHES PRODUKT

Title (fr)  
STRUCTURE NOYAU-ENVELOPPE, SA PRÉPARATION, MÉDICAMENT POUR APPLICATION EXTERNE, AGENT POUR BANDE ET PRODUIT COSMÉTIQUE

Publication  
**EP 3453404 B1 20210602 (EN)**

Application  
**EP 18751519 A 20180207**

Priority

- JP 2017022175 A 20170209
- JP 2017109314 A 20170601
- JP 2017183328 A 20170925
- JP 2018004232 W 20180207

Abstract (en)  
[origin: EP3453404A1] Provided is a core-shell structure having an excellent immediate effect in transdermal absorption of an active ingredient. A core-shell structure comprising a core portion containing an active ingredient, and a shell portion containing a surfactant having an HLB value of 4 to 14, the core portion being solid, and the surfactant containing a saturated hydrocarbon group having 7 to 15 carbon atoms or an unsaturated hydrocarbon group having 7 to 17 carbon atoms.

IPC 8 full level  
**A61K 47/26** (2006.01); **A61K 8/37** (2006.01); **A61K 8/42** (2006.01); **A61K 9/06** (2006.01); **A61K 9/10** (2006.01); **A61K 9/70** (2006.01); **A61K 47/14** (2017.01); **A61K 47/18** (2017.01); **A61Q 19/00** (2006.01)

CPC (source: EP IL KR RU US)  
**A61K 8/0245** (2013.01 - EP IL KR); **A61K 8/0291** (2013.01 - IL KR); **A61K 8/0295** (2013.01 - IL KR); **A61K 8/06** (2013.01 - IL KR); **A61K 8/37** (2013.01 - IL KR RU US); **A61K 8/375** (2013.01 - EP); **A61K 8/42** (2013.01 - EP IL RU US); **A61K 8/4973** (2013.01 - EP); **A61K 9/0014** (2013.01 - IL KR); **A61K 9/0031** (2013.01 - IL); **A61K 9/0043** (2013.01 - IL); **A61K 9/0092** (2013.01 - IL KR US); **A61K 9/06** (2013.01 - IL KR RU US); **A61K 9/10** (2013.01 - IL US); **A61K 9/107** (2013.01 - IL KR); **A61K 9/19** (2013.01 - EP); **A61K 9/70** (2013.01 - IL KR US); **A61K 47/14** (2013.01 - EP IL KR RU US); **A61K 47/16** (2013.01 - EP); **A61K 47/18** (2013.01 - IL RU US); **A61K 47/26** (2013.01 - EP IL RU US); **A61Q 19/00** (2013.01 - EP IL KR RU US); **A61K 9/0031** (2013.01 - US); **A61K 9/0043** (2013.01 - US); **A61K 2800/10** (2013.01 - EP); **A61K 2800/622** (2013.01 - EP)

Cited by  
EP4029495A4

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3453404 A1 20190313**; **EP 3453404 A4 20200304**; **EP 3453404 B1 20210602**; AU 2018218868 A1 20190801; AU 2018218868 B2 20230629; BR 112019014180 A2 20200211; CA 3052757 A1 20180816; CN 109310777 A 20190205; CN 109310777 B 20210730; ES 2888323 T3 20220103; IL 268165 A 20190926; IL 268165 B 20220101; JP 2019052135 A 20190404; JP 2019052138 A 20190404; JP 6370520 B1 20180808; JP 6386691 B1 20180905; JP WO2018147333 A1 20190214; KR 102397632 B1 20220517; KR 20190112266 A 20191004; MX 2019008972 A 20190910; RU 2019127198 A 20210309; RU 2019127198 A3 20210309; RU 2754031 C2 20210825; SG 11201906165P A 20190827; TW 201831167 A 20180901; TW I793103 B 20230221; US 2019117777 A1 20190425; US 2020368356 A1 20201126; WO 2018147333 A1 20180816

DOCDB simple family (application)  
**EP 18751519 A 20180207**; AU 2018218868 A 20180207; BR 112019014180 A 20180207; CA 3052757 A 20180207; CN 201880002393 A 20180207; ES 18751519 T 20180207; IL 26816519 A 20190718; JP 2018004232 W 20180207; JP 2018130742 A 20180710; JP 2018149074 A 20180808; JP 2018513019 A 20180207; KR 20197021711 A 20180207; MX 2019008972 A 20180207; RU 2019127198 A 20180207; SG 11201906165P A 20180207; TW 107104735 A 20180209; US 201816089309 A 20180207; US 202016990634 A 20200811